

REMARKS

Applicants, their principal representatives in Germany, and the undersigned have carefully reviewed the non-final Office Action of May 30, 2006, issued in the subject application in response to the filing of the RCE on March 23, 2006, together with the three newly applied prior art references relied on by the Examiner in the rejections of the three claims submitted in the Second Amendment, filed March 23, 2006. In response, claims 1 and 5 of the subject application have been amended. It is believed that the claims now pending in the subject application are patentable over the prior art cited and relied on by the Examiner in the Office Action of May 30, 2006. Reexamination and reconsideration of the application, and allowance of the claims is respectfully requested.

Initially, it is appreciated that the subject application has a very lengthy specification and a large number of drawings, most of which are not pertinent to the invention recited in the pending claims. The subject invention was discussed with Examiner Haugland during an interview held on March 16, 2006. Additionally, the remarks portion of the Second Amendment set forth a description of the subject invention, as recited in the claims, including references to specification paragraphs and drawing figures. This was done at pages 4 and 5 of that Second Amendment. It is requested that the Examiner take a moment to review that discussion since it will aid in the understanding of the claim discussion, and the prior art discussion to be set forth hereinafter.

As recited in currently amended claim 1, the subject invention is directed to a device for drawing in a leading end of a paper web. As is well-known in the art, such web draw-in devices are limited to usage during the initial webbing up or putting into

operation of a web-fed printing press. As soon as the press is ready for normal operation, the web draw-in devices are taken out of the path of web travel. If they were not removed from that path of web travel, they would interfere with the passage of the webs through the press during the normal operation of the press.

In the subject invention, as depicted generally in Fig. 1, a web, or a plurality of webs are fed over a web insertion roller 16 and along folding hopper insertion plates 21 on their way to a pair of folding rollers 13 and 14, whose function is to impart a longitudinal crease to the web or webs. While various types of paper web traction means can be used to engage the webs during the paper web draw-in procedure, the ones used in the claimed invention, as may be seen for example in Figs. 8-10 are roller chain assemblies that have rollers or wheels which ride in guides, and that have projections 35 which impale the paper webs during the draw-in.

Referring now to Fig. 21, it may be seen that these projections 35 face the hopper insertion roller 16 and travel over a finite length of one or more guides 80, 88, 89, 94, 96, which guides extend along a path of paper web travel which extends along the hopper insertion plates 21 from the hopper insertion roller 16 to the two folding rollers 13 and 14, which are shown in Fig. 1. It is clear from a review of Fig. 21 that some accommodation must be made, at the intersection of the paper web traction means and the hopper insertion roller 16, between the surface of the roller 16 and the spikes or projections 35 on the paper web traction means. Absent such an accommodation, the projections 35 would contact the surface of the roller 16.

As may be seen in Fig. 33, the hopper insertion roller 16, which is the lower one of the two rollers, is provided with an annular passage or groove in its outer, paper web

engaging surface. As may be clearly seen in Fig. 33, the purpose of that passage is to allow the spikes or projections 35 to pass by or through the roller 16 without interference, when the paper web traction means are in the draw-in position.

In the embodiment of the subject invention, as recited in currently amended claim 1, and again referring to Fig. 21, the paper web traction means is caused to travel along a finite length guide path which extends by the roller 16 and along the path of web travel over the hopper insertion plate. This finite length guide path is defined by a finite length guide that is shown generally at 110 in Fig. 21 and that forms an endless running path for the paper web traction means. The finite length guide is carried by a shiftable guide rail support, generally at 220. That guide rail support 220 can be shifted, with respect to the path of web travel over the hopper insertion plate 21, by the use of spaced guide support rods 221 and 22, as may also be seen in Fig. 21. Such shifting of the guide rail support moves the finite length guide portion of the finite length guide toward or away from the hopper insertion plate 21. When the leading ends of the paper webs are to be drawn into the press, the guide rail support is moved so that the paper web traction means are close to the roller 16 and the hopper insertion plate 21, as seen in Fig. 21. When the draw-in of the paper web leading ends has been completed, the guide rail support is shifted, by retraction of the guide rods, to shift the paper web traction means away from the hopper roller 16 and away from the hopper insertion plate 21.

Claim 1, as currently amended, essentially recites the structure of the web draw-in device as discussed above. It sets forth a roller with an annular passage, a paper web traction means, a finite length guide for the traction means, a shiftable guide support and guide rods that support the guide support. Claim 1, as currently amended is not obvious

to one of skill in the art over the prior art cited and relied on.

In the Office Action of May 30, 2006 claims 1 and 6 were rejected under 35 USC 103(a) as being unpatentable over U.S. patent No. 4,605,209 to Fischer in view of U.S. patent No. 5,022,336 to Iwase. The Examiner asserted that Fischer discloses a device for drawing in paper webs including a roller 30 and a finite length paper web traction means 31 having paper engaging means 34. The roller 30 was further asserted as having a passage 33 for receipt of the paper web engaging means 34. The traction means 31 was asserted as being movable with respect to roller 30. Fischer was admitted as not having a finite length guide providing an endless running travel for the finite length traction means. Iwase was cited as showing a finite length web traction means guided by a finite length guide.

As will be discussed below, it is believed that currently amended claim 1 is patentable over the prior art cited and relied on by the Examiner, taken either singly or in combination. Initially, it is again noted that neither of these prior patents is directed to a web draw-in device. In Fischer, the two rollers 30 and 31 are actually moved out of contact when the printing press is being threaded. In this regard, the Examiner's attention is directed to the discussion at Column 4, starting at line 31 of the Fischer patent. The Fischer device is directed to traction rollers whose purpose is to maintain a stack of superimposed webs in relative longitudinal alignment with each other, as the plurality of webs pass through a former. As seen in Fig. 2 of Fischer, a pair of cooperating pull-off rollers 30 and 31 cooperate with each other. The first roller 31 has a plurality of projections 34, each of which is situated in a flute or depression. These flutes or depressions extend in the axial direction of roller 31. The second roller 30 of the pair

has cooperating flutes and lands or cusps. These also extend in the axial direction of the roller 30. As seen in Fig. 2, the flutes of one of the rollers mate with the cusps of the cooperative roller, in the manner of a gear drive. As discussed at Column 4, starting at line 45, the depths of the flutes is greater than the height of the lands or cusps. The length of the projections 34 is selected so that the lands of the roller 30 can still enter the flutes of the roller 31 and not contact the projections 34.

Contrary to the Examiner's assertion, the roller 31 is not supported for movement with respect to the roller 30. Instead, as clearly shown in Fig. 2, and as discussed in the specification of Fischer, at Column 4, starting at line 31, a lever 35, which supports the roller 30, can be pivoted about a pivot point 36. The traction means 31 stays fixed while the cooperating roller moves. If the device of the subject invention were structured in an analogous manner, the roller 16 and the hopper insertion plate 21 would move and the traction means and the guide support would be fixed. Fischer clearly does not show such a structure.

In claim 1, as currently amended, the roller that has a paper web engaging outer surface, is provided with an annular passage. The annular passage is configured to receive the projections on the paper web traction means. In Fischer, the two rollers are both provided with axially extending flutes and lands. The roller of the subject invention, as recited in claim 1 is not the same in structure or function as the roller 30 of the Fischer reference.

In claim 1 as currently amended, there is recited a finite length guide for the traction means, a guide support for that finite length guide, and guide support rods which support the guide support. The finite length guide is shiftable between a web draw-in

portion where it is adjacent the rollers and the path of web travel, and a press operation position where it is spaced from the roller and the path of web travel. As noted above, in the Fischer reference there is no finite length guide, there is no guide support and there is no guide support rods. As further discussed above, the traction means; i.e. roller 31 of Fischer, is fixed and the cooperating roller 30 is movable. Fischer thus clearly does not show or suggest the shiftable guide support and the finite length guide on the shiftable support, as recited in claim 1.

The secondary reference to Iwase, No. 5,022,336 is directed to a fabric feeding device for a sewing machine. It is very doubtful if a person interested in providing a device for drawing in a leading end of a paper web into a printing press would look to the teachings of a fabric conveyor for a sewing machine. At best, Iwase can be taken as showing an endless chain with projections that is passed around spaced sprocket wheels. If the apparatus of Iwase were to be substituted for the wheel 31 of Fischer, the resultant device would still not render obvious the device for drawing in a leading end of paper webs, as recited in currently amended claim 1. Fischer, as modified by Iwase, would use a chain with projections, and extending between sprocket wheels, to pull a paper web through a press, not during draw-in, but while the press is in full operation. The roller 30 of Fischer would still not have an annular groove. The traction means of Fischer, as modified by the Iwase device, is still fixed. There is not teaching, or suggestion in either document of the movement of the finite length guide, or its shiftable guide support, by the use of spaced guide support rods. It is thus earnestly submitted that the combination of Fischer and Iwase does not render obvious the structure of the subject invention, as recited in currently amended claim 1.

Claim 5 was rejected as being unpatentable over Fischer in view of Iwase and further in view of U.S. patent No. 5,605,267 to Whitten. Since claim 5 depends from believed allowable, currently amended claim 1, it is also believed to be allowable. Further, the teachings of the Whitten reference do not supply the teachings which are missing from the combination of Fischer and Iwase. In Whitten there is shown a device which is actually usable to advance a leading end of a web over a former in a printing press. It is thus the only one of the three relied on references that is directed to a use that is similar to that of the present invention. However, Whitten merely shows an endless belt that is support by spaced pulleys. Two of these pulleys 31 and 32 are carried by pistons 35 or 36 so that their positions can be shifted between engaged positions, as seen in Fig. 4 and retractive positions, as seen in Fig. 5. A comparison of Figs. 4 and 5 show that only those pulleys move, the rest of the pulleys stay in the same place.

If the pistons of Whitten were combined with the belt of Iwase, the result would be a structure in which portions of the belt were shifted, while other portions were not. Whitten does not teach or suggest a finite length guide for a paper web traction means, a shiftable guide support for the finite length guide or spaced guide support rods for the guide supports. The combination of Fischer, Iwase and Whitten would not result in the structure of the web draw-in device, as recited in currently amended claim 1.

The several other prior art documents noted in the Office Action of May 30, 2006 were not applied against the claims. No discussion thereof is believed to be required.

SUMMARY

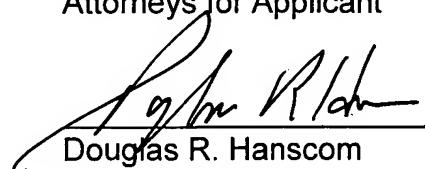
Claims 1 and 5 have been amended. Claim 6 is carried forward. Claims 2-4 and 7 were previously cancelled.

It is believed that the three claims now pending in the subject application are patentable over the prior art of record, relied on by the Examiner, taken either singly or in combination. Allowance of the claims, and passage of the application to issue is respectfully requested.

Respectfully submitted,

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